[illegible]

[illegible]

[illegible]

[illegible]

TABLE [illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
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3.49.3 Tenants, Tables 34, 35

3.2
8.2

To investigate the amount of crowding, respondents were asked if they had any tenants living in the same apartment. In only seven percent of the cases was there an affirmative answer. These people were asked if the tenant were part of the household consumption unit. One-third indicated that they were. It is estimated that in the population there are about 7,000 tenants.

p. 8 (B)

The schedule included a number of questions designed to find out the status of housing in Beirut. These included the age of buildings, construction materials, building installations, condition of buildings, amount of crowding, and extent of home ownership.

7.1 Type of dwelling. Table 94

Beirut is a city of multiple family residences. Sixty-five percent of the sample was composed of residential buildings with two or more families in residence while only eighteen percent were single family. When it is realized that a good many of these one family houses are shacks it can be seen that the single family villa is not characteristic.

7.2 Basis of occupation of household. Table 95

Ownership of buildings has been achieved by a quarter of our sample which corresponds with our results showing most dwellings to be in multiple family buildings.

7.3 Building material used in dwelling. Table 96

Almost the entire city is built either of stone or concrete (94 %). The floors are usually of tile. The poverty stricken tin shacks represent a fraction of the total (3 %). Wood is much too expensive for construction purposes as it must be imported. One result of this is that fire is an almost non-existent danger. Beirut is probably better housed in all but the poorest sections than most metropolitan centers in the world.

p. 20(8)

7.4 Number of floors in building, Table 97

The largest percentage of buildings in our sample were two stories in height (36 %) and the second largest group was of one story buildings (25 %). Tall buildings are relatively rare with only eight percent of the sample five stories or above.

7.5 State of building repair, Table 98

Only about one-fifth of the buildings were classified by the study as being in poor repair. Our definition of poor repair is a building in which extensive major repairs are necessary.

7.6 Age of building where household is located, Table 99

Approximately half (47 %) of the buildings in the sample are over twenty years of age, but the building boom in Beirut is shown by the unusually large percentage of relatively new buildings.

7.7 Permanency of building containing household, Table 100

Our residential sample indicated ten percent so-called "temporary buildings." Temporary is defined in the study as buildings not designed to be anything but temporary emergency shelters. The term is somewhat misleading because a large part of these so-called temporary buildings date back to those constructed to house the Armenian refugees who took refuge in Lebanon in the First World War. These are concentrated in the Medawar district. These places, plus shelters thrown up against permanent buil-

Lib Churchill 8-5 (1968) 1964 MIT Lebanon MSS

342
342 dings, constitute the physical housing problem of Beirut.

7.8 **Incidence of garden plots attached to residences, Table 101**

342 A substantial part of the sample (41 %) live in buildings with adjoining garden plots. No attempt was made to analyze the size or usage of these plots.

7.9 **Number of dwelling rooms in building, Table 102**

The number of dwelling rooms per building has its highest incidence in the interval of four - six dwelling rooms per building (18 %) and decreases steadily until the catch-all category of over twenty-four.

7.10 **Number of people living in building, Table 103**

The concentration of people in buildings is shown in the table. The crude mode is eight per building but includes only twenty-two percent. It is hoped later to cross-tabulate the number of dwelling rooms in the buildings with the number of people.

7.11 **Number of families on floor of interviewed household, Table 104**

The great majority of the sample (87 %) are the sole occupants of the floors on which they reside. When those floors which accommodate only two families are added, we find that eighty-eight percent of the households are included.

7.12 **Number of rooms per household unit, Table 105**

The modal number of rooms per family apartment is four. This should be compared to the mean family size of 5.7.

427 7.13 **Terms of rental payment for dwelling, Table 106**

Rental payments are generally made either

p. 21 (A)

365
.792

Table 34

Number of Tenants in Household

No. of Household	Number	Percent
Total	1921	100.00
One	47	2.45
Two	20	1.04
Three	14	0.73
More than three	47	2.45
None	1793	93.34

$\sigma_z = .0144$
$\sigma = .086$

Table 35

Tenants by Membership to Household Consumption Unit

	Number	Percent	sp.
Total	118	100.00	
Considered Members	38	32.76	.044
Not Considered Members	76	65.52	.044
Some Yes / Some No	2	1.72	

18 Chemtech 5-6 (1954) 1984 1421 Lehmann 5863

Table 97

Number of Floors in Building

No. of Floors	Number	Percent
Total	1852	100.00
One	465	25.11
Two	672	36.28
Three	367	19.82
Four	193	10.42
Five	98	5.30
Six	38	2.05
More than six	15	0.81
No answer	4	0.21

$\sigma_{\bar{y}}$ = .030
v = .012

Table 98

State of Building Repair

State of repair	Number	Percent	$\sigma_{\bar{p}}$
Total	1825	100.00	
Good	714	39.12	.011
Fair	758	41.54	.011
Poor	348	19.07	.009
No answer	5	0.27	

p. 54 (a)

U.S. Census of Housing: 1960. Vol. IV, Part 3

Table 95

Basis of Occupation of Household

Owned	Number	Percent	sp.
Total	1831	100.00	
Yes	478	26.60	.020
No	1348	73.51	.020
Part owner or owned	5	0.27	
Yes but mortgaged			
No answer	4	0.22	

Table 96

Building Material Used in Dwelling

Type of bldg. material	Number	Percent	sp.
Total	1926	100.00	
Stone	910	47.25	.011
Tile	61	3.17	.004
Wood	48	2.49	.003
Brick	7	0.36	
Concrete	891	46.26	.011
Other	9	0.47	

19. Churchill 0-4 (1969) 1954 MH Lebanon MH

Tibi Churchill 8-6 (1969) 1984 MIT Libraries MIT

Table 99

Age of Building where Household is Located

Age of building	Number	Percent
Total	1826	100.00
Less than 1 year	14	0.77
1 — 5 years	266	14.57
6 — 10 years	193	10.57
11 — 15 years	176	9.64
16 — 20 years	259	14.18
More than 20 years	858	46.99
No answer	60	3.28

χ^2 = .203
v = .012

Table 100

Permanency of Building Containing Household

Type of building	Number	Percent	sp.
Total	1926	100.00	
Permanent	1727	89.67	.007
Temporary	199	10.33	.007

p. 84(c)

their relatives abroad. The villages are less compact than in other parts of the Near and Middle East, and separate farmsteads are common. Extremes of poverty, associated with primitive standards of sanitation, are most frequently encountered in the villages of southern Lebanon. In the cities, substandard housing is found chiefly in the old, congested quarters and in the Armenian sections.

The typical dwellings in all parts of the country are constructed of stone, cement or concrete blocks, with a surface of whitewashed or tinted plaster. The roofs are of two general types: peaked and of red tile; or flat, with a covering of cement or of mud and brush. The houses vary in size from one to several rooms, sometimes with two or more stories. The use of wood as a building material is prohibited by the fire regulations in the towns, but small wooden shacks are occasionally seen on the outskirts.

Beirut is a cosmopolitan city, a mixture of Arabic and Western culture. The older parts of the city are overcrowded, with narrow streets lined by innumerable small shops, which frequently have living rooms in the rear. Apartment houses, interspersed with detached dwellings surrounded by colorful gardens, dominate the newer developments. Architecturally, all gradations are encountered between old Arab-style houses and modern villas.

ENVIRONMENT AND SANITATION

Water Supplies

Water supplies are obtained from streams, springs and wells, and, in general, are abundant in the coastal and the mountain districts but deficient in the interior. Beirut derives its water supply from the Nahr el Kelb, or Dog River, which is fed from an underground spring in the hills about 18 miles from the city. It flows by gravity through a tunnel and open canals to Dubaiya, 9 miles distant, where it is treated by preliminary rapid filtration, slow sand